

WHAT IS CLAIMED IS:

1. A hard disk drive comprising:

a medium recording information;

a head reading and writing of information with respect

5 to said medium;

a mechanism positioning said head on said medium;

an enclosure housing these components therein;

a hole formed in said enclosure passing air between the
interior and the exterior of said enclosure; and

10 a controller controlling opening and closing of said hole
in accordance with an operating condition of said medium.

2. A hard disk drive according to claim 1, wherein said
controller closes said hole when the hard disk drive is not
supplied with electric power.

15 3. A hard disk drive according to claim 1, further
comprising a mechanism rotating said medium, wherein said
controller closes said hole when said medium stops rotation.

4. A hard disk drive according to claim 1, wherein said
controller opens said hole when the hard disk drive is supplied
20 with electric power.

5. A hard disk drive according to claim 1, further
comprising a mechanism rotating said medium, wherein said
controller opens said hole upon rotation of said medium.

6. A hard disk drive according to claim 2, wherein said
25 controller opens said hole when the hard disk drive is supplied

with electric power.

7. A hard disk drive according to claim 3, wherein said controller opens said hole when the hard disk drive is supplied with electric power.

5 8. A hard disk drive according to claim 2, further comprising a mechanism rotating said medium, wherein said controller opens said hole upon rotation of said medium.

10 9. A hard disk drive according to claim 3, further comprising mechanism rotating said medium, wherein said controller opens said hole upon rotation of said medium.

10. A hard disk drive according to claim 1, further comprising:

a mechanism rotating said medium; and

15 a solenoid operated valve controlled by said controller and which, when the supply of electric power to the hard disk drive is cut off, operates and closes said hole with an electromotive force which said mechanism rotating the medium generates.

20 11. A hard disk drive according to claim 1, further comprising:

a mechanism rotating said medium; and

an opening/closing mechanism which is controlled by said controller and which operates upon receipt of an air flow created by rotation of said medium.

25 12. A hard disk drive comprising:

a medium recording information;

a head reading and writing of information with respect to said medium;

a mechanism positioning said head on said medium;

5 an enclosure housing these components therein;

a hole formed in said enclosure passing of air between the interior and the exterior of said enclosure; and

a valve which opens said hole when a difference in pressure between the interior and the exterior of said enclosure reaches
10 a predetermined value or more.

13. A hard disk drive according to claim 12, wherein said valve is opened and closed by a spring.

14. A hard disk drive according to claim 13, wherein said predetermined value of the pressure difference is set in terms
15 of a spring coefficient of said spring.

15. A hard disk drive according to claim 12, wherein said valve is constituted by an elastic body with a slit formed therein.

16. A hard disk drive according to claim 15, wherein said
20 predetermined value of the pressure difference is set in terms of an elastic modulus of said elastic body.

17. A hard disk drive according to claim 15, wherein said predetermined value of the pressure difference is set in terms of thickness of said elastic body.

25 18. A hard disk drive comprising:

means for recording information;

means for read and write of information with respect to
said recording means;

means positioning said means for read and write on said
5 recording means;

means for housing these means therein;

means for passing air between the inside and outside of
said housing means; and

means for controlling opening and closing of said passing
10 means in according to an operating condition of said recording
means.

19. A hard disk drive according to claim 18, further
comprising:

means for rotating said recording means, wherein
15 said controlling means closes said passing means when
said recording means stops its rotation.

20. A hard disk drive according to claim 18, further
comprising:

means for rotating said recording means, wherein
20 said controlling means opens said passing means when said
recording means begins rotating.

21. A hard disk drive according to claim 18, further
comprising:

means for rotating said recording means; and
25 means for closing said passing means controlled by said

controlling means and operates by electromotive force generated by rotation of said rotating means, when electric power supplying to the hard disk drive is cut off.

1007544-061500